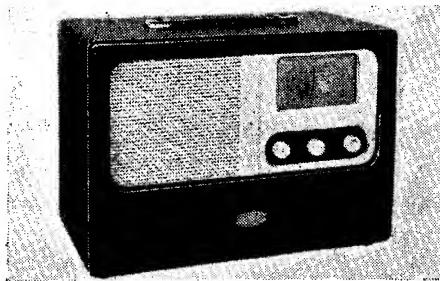


"TRADER" SERVICE SHEET

883



The Amplion ADP2 portable.

**A**n all-dry battery portable with two wavebands, the Amplion ADP2 is a superhet employing four valves and using the Ever Ready No. 3 combined H.T. and L.T. battery.

The ADP1 was an earlier model using a chassis almost identical with that in the ADP2, but housed in a different case. The differences are explained under "Divergencies" overleaf.

*Release dates and original prices: ADP1 February, 1948, £13 13s (with battery); increased September, 1948, to £13 15s. ADP2, December, 1948, £13 15s (less battery), increased November, 1947, to £14 14s; reduced February, 1948, to £14 14s (with battery); then June, 1948, to £12 12s (less battery); and October, 1948, to £11 2s 6d (with battery). Purchase tax extra.*

#### CIRCUIT DESCRIPTION

Tuned frame aerial input by **L1**, **C16** (M.W.), with the addition of loading coil **L2** on L.W., precedes a heptode valve (**V1, 1A7GT**) operating as frequency changer with electron coupling.

Triode oscillator grid coils **L3** (M.W.) and **L4** (L.W.) are tuned by **C17**, with

# AMPLION ADP2

Covering also Model ADP1

parallel trimming by **C18** (M.W.) and **C4**, **C19** (L.W.), and series tracking by **C5** (M.W.) and **C6** (L.W.). Reaction coupling from anode via **C7**, by **L5** (M.W.) and **L6** (L.W.), with additional coupling due to the inclusion of the trackers in the common grid and anode circuit.

Second valve (**V2, 1N5GT**) is a variable-mu B.E. pentode operating as intermediate frequency amplifier with tuned transformer couplings **C20**, **L7**, **L8**, **C21** and **C22**, **L9**, **L10**, **C23**.

**Intermediate frequency 465 kc/s.**

Diode second detector is part of single diode triode valve (**V3, 1H5GT**). Audio frequency component in rectified output is developed across manual volume control **R8**, which is also the diode load resistor, and passed via A.F. coupling capacitor **C10** and C.G. resistor **R7** to grid of triode section, which operates as A.F. amplifier. I.F. filtering by **C8**, **R5**, **C9** in diode circuit and **C11** in **V3** triode anode circuit.

D.C. potential developed across **R5**, **R6** in series is tapped off and fed back,

(Continued col. 1 overleaf)

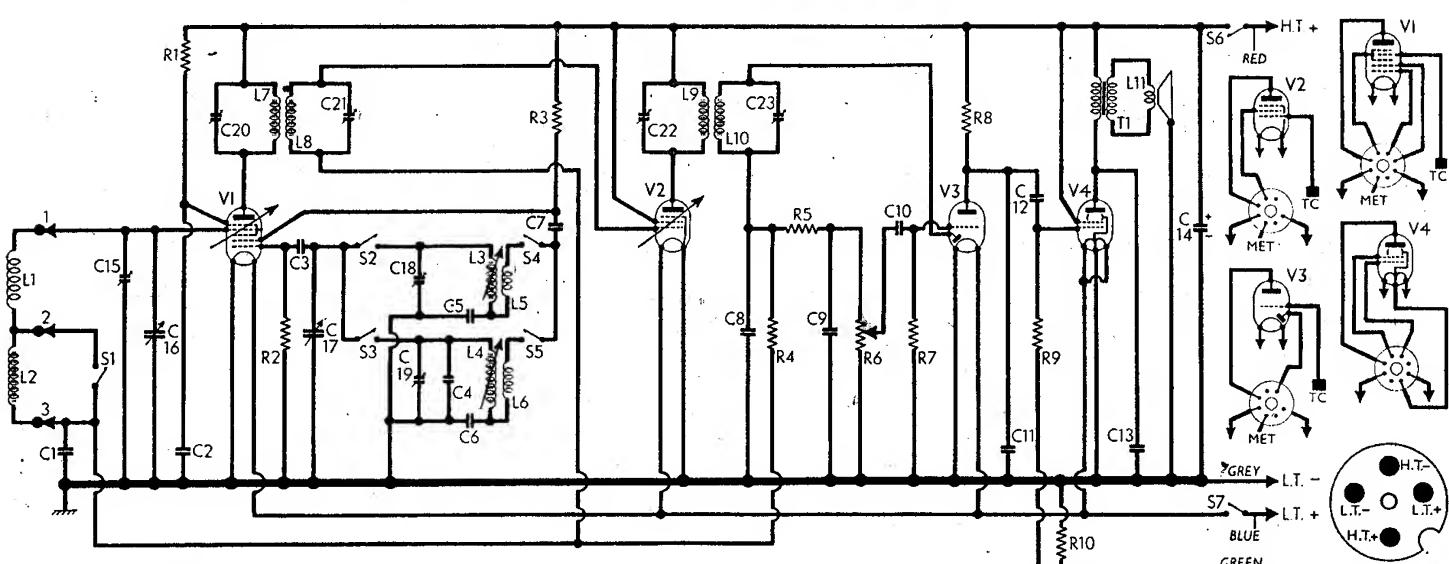
#### COMPONENTS AND VALUES

RESISTORS	Values (ohms)	Locations
R1	V1 S.G. feed	47,000 J5
R2	V1 osc. C.G.	220,000 K6
R3	Osc. anode load	22,000 J5
R4	A.G.C. decoupling	2,500,000 H5
R5	I.F. stopper	47,000 F4
R6	Volume control	500,000 H3
R7	V3 triode C.G.	2,500,000 H5
R8	V3 triode load	1,000,000 G5
R9	V4 C.G. resistor	2,500,000 F5
R10	V4 G.B. resistor	560 E6

CAPACITORS		Values (μF)	Locations
C1	A.G.C. decoupling	0.1	J6
C2	V1 S.G. decoupl.	0.1	J5
C3	V1 osc. C.G.	0.0001	K4
C4	Osc. L.W. trimmer	0.0001	J4
C5	Osc. M.W. tracker	0.00035	J4
C6	Osc. L.W. tracker	0.00015	J4
C7	Osc. anode coup.	0.002	K5
C8	I.F. by-pass capaci-	0.0001	G4
C9	tors	0.0001	F6
C10	A.F. coupling	0.01	G4
C11	I.F. by-pass	0.0001	G4
C12	A.F. coupling	0.02	F5
C13	Tone corrector	0.001	E6
C14*	H.T. reservoir	8.0	F4
C15†	Aerial M.W. trim...	—	A1
C16†	Aerial tuning	—	B1
C17†	Oscillator tuning	—	B1
C18†	Osc. M.W. trim.	—	K4
C19†	Osc. L.W. trim.	—	K5
C20†	1st I.F. transformer	—	B2
C21†	tuning	—	B2
C22†	2nd I.F. transformer	—	C2
C23†	tuning	—	C2

\* Electrolytic. † Variable. ‡ Pre-set.

OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1	Frame aerial	2.1	A2
L2	L.W. loading coil	12.5	B2
L3	Oscillator tuning	2.6	K4
L4	coils	6.3	K5
L5	Oscillator reaction	0.5	K4
L6	coils	0.6	K5
L7	1st I.F. trans.	5.0	B2
L8	Sec.	5.0	B2
L9	2nd I.F. trans.	9.5	C2
L10	Sec.	9.5	C2
L11	Speech coil	2.75	—
T1	Speaker trans.	470.0	—
S1-S5	W/band switches	—	K3
S6	H.T. circuit switch	—	K3
S7	L.T. circuit switch	—	K3



Circuit diagram of the Amplion ADP2. Small differences that occur in some of these models, and the differences in the ADP1 are explained under "General Notes" overleaf.

